REGULATION 7.25 Standard of Performance for New Sources Using Volatile Organic Compounds

Air Pollution Control District of Jefferson County Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control **Pursuant To:** KRS Chapter 77 Air Pollution Control

Necessity and Function: KRS 77.180 provides that the Air Pollution Control Board may make and enforce all needful orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation provides for the control of emissions of volatile organic compounds from new sources.

SECTION 1 Applicability

This regulation applies to each affected facility not elsewhere regulated in Regulation 7 as to emissions of VOCs and which commenced after the effective date of this regulation. Sources previously under Regulation 7.24 are subject to this regulation.

- 1.1 Those portions of any series of affected facilities designed for processing a continuous web, strip, or wire which emit volatile organic compounds shall be taken collectively to determine compliance with this regulation.
- 1.2 Emissions of VOCs resulting from air or heated drying of products for the first 12 hours after their removal from an affected facility shall be included in determining compliance with this regulation.
- 1.3 Emissions of VOCs to the atmosphere from the cleanup with VOCs of any affected facility shall be included with other emissions of VOCs from that affected facility for determining compliance with this regulation.
- 1.4 This section shall not apply to the spraying or other use of insecticides, pesticides, or herbicides.

SECTION 2 Definitions

Terms used in this regulation not defined herein shall have the meaning given them in Regulation 1.02.

- 2.1 "Affected facility" means any equipment, machine, and other device, or any combination of facilities at a source, which uses VOCs and which has the potential to emit greater than 5 tons of VOCs per year.
- 2.2 "Potential emissions" means the emissions that will result if the equipment, machine, or other device is operated 8,760 hours per year, unless limited by permit conditions, at maximum actual capacity and without any emissions controls or vapor recovery systems unless required by permit conditions.
- 2.3 "Volatile organic compound" (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.
- 2.3.1 This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: Methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform);

3-93 7.25-1

- 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoro-methane (CFC-12); chlorodifluoro-methane (CFC-22); trifluoromethane (FC-23); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoro-ethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro 1,1,1,2-tertrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetra-fluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); and perfluorocarbon compounds which fall into these classes:
- 2.3.1.1 Cyclic, branched, or linear, completely fluorinated alkanes;
- 2.3.1.2 Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- 2.3.1.3 Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- 2.3.1.4 Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- 2.3.2 For purposes of determining compliance with emissions limits, VOC will be measured by the approved test methods in Regulation 1.04. Where such method also measures compounds with negligible photochemical reactivity, these negligiblity-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by the District.
- 2.3.3 As a precondition to excluding these compounds as VOC or at any time thereafter, the District may require an owner or operator to provide monitoring or testing methods and results demonstrating to the satisfaction of the District, the amount of negligibly-reactive compounds in the source's emissions.

SECTION 3 Standard for Volatile Organic Compounds

- 3.1 No owner or operator shall construct or operate an affected facility unless it is equipped with and utilizes best available control technology (BACT) as determined at the time of the construction permit review by the District. Emission rates in terms of pounds of VOCs per hour and/or work practice, equipment specifications, and/or raw material specifications shall be set out as permit conditions on the construction and/or operating permits to insure compliance with this requirement.
- 3.2 Affected facilities permitted prior to December 16, 1987, that emit no more emissions than that permitted at such date shall be deemed to be in compliance.
- 3.3 The time period for compliance determinations shall not exceed 24 hours and may be less if limited by a permit restriction, but it shall not exceed the hours operated in a day. For previously permitted sources, the averaging time for compliance shall be 24 hours unless the source either operates less hours per day or a shorter time is specified in the permit.

SECTION 4 Monitoring and Reporting

4.1 Any person controlling the emission of VOCs pursuant to this regulation shall provide, properly install, calibrate, maintain in good working order and in operation, devices as specified in the permit to construct or the permit to operate, or as specified by the District, for indicating temperatures, pressures, rates of flow or other operating conditions necessary to determine the degree and effectiveness of air pollution control equipment.

3-93 7.25-2

4.2 Any person using VOC or any material containing VOCs shall supply the District, upon request and in the manner and form prescribed, written evidence of the chemical composition, physical properties, and amount consumed for each VOC used.

SECTION 5 Compliance

A new affected facility shall comply with the requirements of this regulation on startup.

Adopted v1/7-14-76; effective 6-13-79; amended v2/2-17-88, v3/3-17-93.

3-93 7.25-3